Connecting Python with Microsoft SQL server management studio:

Step 1: Install Required Packages

!pip install pyodbc, !pip install pymssql

Step 2: Import the Package

import pyodbc, import pymssql

Step 3: Establish a Connection

Using pyodbc

conn = pyodbc.connect('DRIVER={SQL Server};SERVER=HP;DATABASE=HR;Trusted_Connection=yes') # For Windows Authentication

Using pymssql

conn = pymssql.connect(server=HP, user='<username>', password='<password>', database='<database-name>') # SQL Server Authentication

Step 4: Execute a Query

cursor.execute("SELECT Warehouse, Product, Model, Quantity FROM inventory")

data2 = cursor.fetchall()

processed_rows = [tuple(df) for df in data2]

Create the DataFrame

df1 = pd.DataFrame(processed_rows, columns=["Warehouse", "Product", "Model", "Quantity"])

df1.head()

Step 5: Close the Connection

conn.close()

Connecting Python with MYSQL:

Step 1: Install Required Packages

```
!pip install mysql-connector-python
```

Step 2: Import the Package

```
import mysql.connector
```

Step 3: Establish a Connection

```
db = mysql.connector.connect(
    host='IP Address or localhost',
    user='username',
    password='1234',
    database='databasename'
)
cursor = db.cursor() # Creates a cursor object from the established connection
```

Step 4: Execute a Query

```
query = """ SELECT * from dmart.dmartready"""
cursor.execute(query)  # Executes a SELECT query
data = cursor.fetchall() # Fetches all rows from the executed query
df = pd.DataFrame(data, columns = ["CustomerID", "ProductID", "OrderID", "Age", "Gender"])
df.head()
```

Step 5: Close the Connection

```
conn.close()
```